

**METHOD AND SYSTEM FOR EFFICIENTLY READING AND
PROGRAMMING OF DUAL CELL MEMORY ELEMENTS**

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ABSTRACT OF THE DISCLOSURE

A memory system (e.g., memory card) for reading and programming (writing) of dual cell memory elements is disclosed. According to one aspect of the invention, all bit lines for the memory system can be productively used during reading or 10 programming so as to achieve improved (e.g., maximum) parallelism of read and/or program operations. The memory system is typically a non-volatile memory product or device that provides binary or multi-state data storage.